10

15

## Claims

What is claimed is:

1. A component mounting method comprising the steps of: picking up a component;

positioning the component on a circuit substrate; and mounting the component onto the circuit substrate,

wherein a fall of a temperature of a component mounting apparatus is prevented during a pause of component mounting operation, thereby eliminating degradation of a component mounting accuracy due to temperature changes.

- 2. The component mounting method according to claim 1, wherein a fall of the temperature of the component mounting apparatus is prevented by performing an idling operation automatically during a pause of component mounting operation.
- 3. The component mounting method according to claim 2, further comprising the step of performing an idling operation automatically during waiting for a next circuit substrate.
- 4. The component mounting method according to claim 2, further comprising the steps of:

determining if the temperature change of each of units of the apparatus or a suspending period is out of an allowable limit by a controller during a pause of component mounting operation; and

performing the idling operation when the temperature

25 change or the suspending period is out of the allowable limit.

10

15

20

5. The component mounting method according to claim 2, further comprising the steps of:

detecting the temperature of each of units of the apparatus by a sensor provided at each of the units; and starting the idling operation automatically based on the detected temperature.

- 6. The component mounting method according to claim 1, wherein a fall of the temperature of the component mounting apparatus is prevented by performing an idling operation when a switch of an operating section of the apparatus is turned on.
- 7. The component mounting method according to claim 2, further comprising the steps of:

measuring a duration of the idling operation or the temperature of each of units of the apparatus after the idling operation; and

performing the idling operation based on the results of the measurements.

- 8. The component mounting method according to claim 1, wherein a fall of the temperature of the component mounting apparatus is prevented by automatically maintaining a temperature of each of units of the apparatus by the use of a heater during a pause of component mounting operation.
  - 9. A component mounting apparatus comprising:
  - a component supply section for supplying components;
- a head for picking up a component from the component

15

supply section and mounting the component onto a circuit substrate; and

a controller for controlling each of units of the apparatus,

- wherein the controller is adapted to prevent a fall of a temperature of the component mounting apparatus during a pause of component mounting operation, thereby eliminating degradation of a component mounting accuracy due to temperature changes.
  - 10. The component mounting apparatus according to claim
    9, wherein the controller includes an idling section for
    controlling the apparatus so as to perform an idling operation
    during a pause of component mounting operation.
  - 11. The component mounting apparatus according to claim 10, wherein the idling section is adapted to make the apparatus perform an idling operation during waiting for a next circuit substrate.
- 12. The component mounting apparatus according to claim 10, wherein the idling section determines if the temperature change of each of the units of the apparatus or a suspending period is out of an allowable limit during a pause of component mounting operation, and is adapted to make the apparatus perform the idling operation when the temperature change or the suspending period is out of the allowable limit.
- 25 13. The component mounting apparatus according to claim

15

11, wherein the idling section is adapted to continue the current idling operation, blocking the next circuit substrate being brought in, whenever it determines that the temperature of any of the units is out of the allowable limit.

- 14. The component mounting apparatus according to claim 10, further comprising a temperature sensor provided with a unit of the component mounting apparatus, wherein the idling section is adapted to start an idling operation based on the temperature detected by the sensor.
  - 15. The component mounting apparatus according to claim
    10, further comprising an operating section for operating the
    apparatus for mounting a component, wherein the idling section
    is adapted to start an idling operation when a switch of the
    operating section is turned on.
  - 16. The component mounting apparatus according to claim 9, further comprising a heater provided with a unit of the component mounting apparatus, wherein the idling section controls the temperature of each of the units by the use of the heater during a pause of component mounting operation.
- 17. The component mounting apparatus according to claim
  14, further comprising a display screen for displaying whether
  the temperature of each of the units is within the allowable
  limit.